

Laucks⁸²_{years}

Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works
628 S. Hanford
Seattle, WA 98134

ATTN : Dale Olsen

Work ID : TCLP Testing
Taken By : Client
Transported by: Hand Delivered
Type : Sludge

Certificate of Analysis

Work Order# : 90-08-555

DATE RECEIVED : 08/30/90

DATE OF REPORT: 09/14/90

CLIENT JOB ID : M16437

SAMPLE IDENTIFICATION:

	Sample
	Description
01	3200 Acid Yard
02	3317 Plasma Burner Sludge
03	Method Blank

The flag "U" indicates the analyte of interest was not detected, to the limit of detection shown.

Unless otherwise instructed all samples will be discarded on 10/21/90

Respectfully submitted,
Laucks Testing Laboratories, Inc.

J. M. Owens
J. M. Owens

FOUND 03/10/91 :

IN BACK OF DESK FILE WITH OTHER LAB REPORTS
NEVER SHOWN TO JIM BROWN OR WAYNE LARSON.
NO WAY OF KNOWING IF TEST WAS DONE EXPERIMENTALLY OR AS
ACTUAL SAMPLE.

03/10/91
C.I.A.S.



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AKC-0014511

Laucks⁸²_{LLC}

Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

Chemistry, Microbiology, and Technical Services

REPORT ON SAMPLE: 9008555-01A
Client Sample ID: 3200 Acid Yard

Date Received : 08/30/90 Collection Date : N/A
Test Code : TCLP_M Date Extracted : 09/04/90

Extracted by the Toxic Characteristic Leaching Procedure (TCLP), Method 1311, Test Methods for Evaluating Solid Waste, U.S.E.P.A., 3rd edition. Metals were determined on the aqueous extract using either the EPA's 7000 series or EPA Method 6010 or a combination of both.

mg/L

Analyte	Result	MCL	SDL	Analysis Date
Silver	0.10 U	5.0	0.1	09/11/90
Barium	0.10	100.	0.1	09/11/90
Cadmium	0.01 U	1.0	0.01	09/11/90
Lead	0.10 U	5.0	0.1	09/12/90
Chromium	2.6	5.0	0.1	09/11/90
Selenium	0.20 U	1.0	0.2	09/11/90
Arsenic	0.20 U	5.0	0.2	09/11/90
Mercury	0.01 U	0.2	0.005	09/07/90
Copper	4.7	N/A	0.1	09/11/90
Nickel	20	N/A	0.1	09/11/90
Zinc	1.8	N/A	0.1	09/11/90

MCL = Maximum Contamination Level, as established by regulation.

SDL = Sample Detection Limit



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AKC-0014512

Laucks⁸²

Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

Chemistry, Microbiology, and Technical Services

REPORT ON SAMPLE: 9008555-02A

Client Sample ID: 3317 Plasma Burner Sludge

Date Received : 08/30/90

Test Code : TCLP_M

Collection Date : N/A

Date Extracted : 09/04/90

Extracted by the Toxic Characteristic Leaching Procedure (TCLP), Method 1311, Test Methods for Evaluating Solid Waste, U.S.E.P.A., 3rd edition. Metals were determined on the aqueous extract using either the EPA's 7000 series or EPA Method 6010 or a combination of both.

mg/L

Analyte	Result	MCL	SDL	Analysis Date
Silver	0.10 U	5.0	0.1	09/11/90
Barium	0.10	100.	0.1	09/11/90
Cadmium	0.01 U	1.0	0.01	09/11/90
Lead	0.10 U	5.0	0.1	09/12/90
Chromium	0.50	5.0	0.1	09/11/90
Selenium	0.20 U	1.0	0.2	09/11/90
Arsenic	0.20 U	5.0	0.2	09/11/90
Mercury	0.05	0.2	0.050	09/07/90
Copper	2.8	N/A	0.1	09/11/90
Nickel	30	N/A	0.1	09/11/90
Zinc	3.5	N/A	0.1	09/11/90

MCL = Maximum Contamination Level, as established by regulation.

SDL = Sample Detection Limit



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AKC-0014513

Laucks⁸²_{RUUS}

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Chemistry, Microbiology, and Technical Services

REPORT ON WORK ORDER 9008555 PREPARATION BLANKS

Test : Cadmium (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.010 U Control Limit : 0.020
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Chromium (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Copper (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Nickel (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2



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AKC-0014514

Laucks⁸²_{RU/S}

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Chemistry, Microbiology, and Technical Services

REPORT ON WORK ORDER 9008555 PREPARATION BLANKS

Test : Lead (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Selenium (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.200 U Control Limit : 0.400
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Zinc (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

* = outside control limits
U = analyte not detected



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AKC-0014515

Laucks⁸²

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Chemistry, Microbiology, and Technical Services

REPORT ON WORK ORDER 9008555 PREPARATION BLANKS

Test : Mercury (Method 7470)
Blank Name : B0906HGW01 Preparation Date: 09/06/90
Conc Found : 0.005 U Control Limit : 0.010
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Silver (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Arsenic (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.200 U Control Limit : 0.400
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2

Test : Barium (Method 6010)
Blank Name : B0907ICPEP3 Preparation Date: 09/07/90
Conc Found : 0.100 U Control Limit : 0.200
Units : mg/L

This blank and comments, if any, apply to the following sample(s):
1,2



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AKC-0014516